The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (canceled).

Claim 4 (new). Method for cooling rising vapors (3) in a desorption column (2) by means of a condenser (1) disposed at the head of the desorption column (2), configured as an indirect heat exchanger, through which cooling water flows, whereby the cooling water enters into the condenser (1) at the bottom and flows upward through vertical channels (8) disposed in the condenser (1), wherein cooling water containing hydrogen sulfide is used, wherein the cooling water exits as an overflow (6), by means of top-side openings (10) of the channels (8), at the top of the condenser (1), after the heat absorption has occurred, and wherein the overflow (6) flows into the desorption column (2).

Claim 5 (new). Desorption column for carrying out the method according to claim 4, having a column head, a condenser (1) disposed therein, which has channels (8) through which

cooling water flows, whereby the channels (8) are disposed vertically and flow can take place through them from the bottom to the top, and they form heat exchanger surfaces for cooling rising vapors, and whereby the channels (8) have top openings and thereby form an overflow (6) for the cooling water, which flows into the column (2).